1. A road speed surface maintenance machine with vacuumized dust control, comprising:

a. a transportable machine chassis having a front axle and at least one rear axle;

b. a main road surface cleaning head in fluid communication with the vacuum source, and having an opening adapted to be adjacent a surface intended to be cleaned, the main road surface cleaning head suspended from the transportable machine chassis and adapted to be located rearward of the at least one rear axle;

c. a hopper coupled to the transportable machine chassis for collecting dust, dirt, and debris;

d. a conveying mechanism having a housing in fluid communication with the vacuum source, and the housing having a first open end in communication with the road surface cleaning head, and a second end in communication with the hopper, the conveying mechanism adapted for transporting to the hopper any dust, dirt, and debris from the main road surface cleaning head; and

e. an air filtration mechanism for substantially removing any airborne dust in air drawn from the main road surface cleaning head before being exhausted to the outside environment.

2. The road sweeper of claim 1, wherein the vacuum source includes a vacuum fan in communication with the outside environment for establishing an airflow from the main road surface cleaning head, through the conveying mechanism housing, entering the hopper, and exhausting from the hopper out to the outside environment, thereby vacuumizing, at least in part, the main road surface cleaning head, the conveying mechanism housing, and the hopper.

3. The road sweeper of claim 1, wherein the main road surface cleaning head includes an elongated rotary broom have a rotational axis generally aligned with the surface intended to be cleaned.

4. The road sweeper of claim 3, further including at least a first gutter cleaning head in fluid communication with the vacuum source, and having an opening adjacent a gutter area intended to be cleaned.

5. The road sweeper of claim 2, wherein the air filtration mechanism includes a dust filter assembly in the path of air entering the hopper and exhausting out to the outside environment so that any airborne dust within the hopper is substantially blocked from exhausting out to the outside environment.

6. The road sweeper of claim 3, wherein the main road surface cleaning head is suspended from the transportable machine chassis and controllably positioned so that the elongated rotary broom is capable of making contact with the road surface intended to be cleaned.

7. A road speed broom sweeper with vacuumized dust control, comprising:

a. a transportable machine chassis having a front axle and at least one rear axle;

b. a vacuum source coupled to the transportable machine chassis;

c. a rotary broom controllably suspended from the transportable machine chassis rearward of the at least one rear axle and controllably positioned so as to be capable of making contact with a road surface intended to be swept;

d. a rotary broom shroud forming a rotary broom chamber in fluid communication with the vacuum source capable of being vacuumized, the rotary broom shroud being located around and about the rotary broom and having an opening adapted to be adjacent a surface intended to be cleaned;

e. a hopper for collecting dust, dirt, and debris;

f. a conveyor mechanism having a housing in fluid communication with the vacuum source, and the housing having a first open end in communication with the rotary broom chamber, and a second end in communication with the hopper, the conveyor mechanism adapted for transporting to the hopper any dust, dirt, and debris thrown from the rotary broom; and,

g. an air filtration mechanism in the path of the air entering the hopper and exhausting out to the outside environment for substantially removing any airborne dust in air drawn from the rotary broom chamber before being exhausted to the outside environment.

8. The road sweeper of claim 7, wherein air filtration mechanism includes a vacuum fan in communication with the outside environment for establishing an airflow from the rotary broom chamber, through the conveyor mechanism housing, entering the hopper, and exhausting from the hopper out to the outside environment, thereby vacuumizing, at least in part, the rotary broom chamber, the conveyor mechanism housing, and the hopper.

9. A street sweeper with vacuumized dust control, comprising:

a. a rotary broom suspended from a transportable machine chassis and controllably positioned so as to be capable of making contact with a road surface intended to be swept;

b. a rotary broom shroud forming a rotary broom chamber capable of being vacuumized, the rotary broom shroud being located around and about the rotary broom and in proximity to the road surface, at least in part;

c. a hopper capable of storing dust and debris;

d. a conveyor mechanism for transporting dust and debris thrown from said rotary broom to the hopper;

e. a conveyor housing capable of being vacuumized, the conveyor housing having a first open end in communication with and coupled to the rotary broom chamber, and a second end in communication with and coupled to the hopper;

f. a vacuum source assembly including a vacuum fan in communication with the outside environment for establishing an airflow from the rotary broom chamber, through the conveyor housing, and entering the hopper, and exhausting from the hopper out to the outside environment, thereby vacuumizing, at least in part, said rotary broom chamber, said conveyor housing, and said hopper; and,

g. a dust filter assembly in the path of the airflow entering said hopper and exhausting out to the outside environment so that any airborne dust

within said hopper is substantially blocked from exhausting out to the outside environment.

10. The street sweeper of claim 9, wherein the street sweeper is capable of achieving and maintaining road speed while the rotary broom, fan and conveyor operate.

11. The street sweeper of claim 9, wherein the rotary broom has an elevation above the road surface and wherein the elevation may be adjusted by multiple actuating cylinders, the actuating cylinders being attached to multiple cables and the cables being located between the pivotal broom support arms and the superstructure framework.

12. The street sweeper of claim 9, wherein the chassis further includes a gutter broom assembly mounted on the underside of the chassis.

13. A street sweeper, comprising:

a. transport means;

b. a hopper carried by the transport means;

c. means for rotary sweeping, the means for rotary sweeping carried by the transport means and capable of dislodging debris and dust from a road surface;

d. means for conveying debris from the means for rotary sweeping to the hopper;

e. means for generating an airflow from the means for rotary sweeping to the hopper so as to entrain dust dislodged by the means for rotary sweeping; and,

f. means for separating entrained dust from the airflow from the means for rotary sweeping at the hopper.

14. The street sweeper of claim 13, wherein the road speed broom sweeper is capable of operating at road speed.

15. The street sweeper of claim 13, further comprising:

a. means for gutter sweeping to dislodge dust and debris from a road gutter; and,

b. means for entraining dislodged dust from the means for gutter sweeping to the hopper.

16. The street sweeper of claim 15, wherein the means for separating entrained dust from the airflow from the means for rotary sweeping also functions as a means for separating entrained dust from the means for gutter sweeping.

17. The street sweeper of claim 13, further including a drag shoe means to redirect stray debris to the path of the means for rotary sweeping.

18. The street sweeper of claim 13, wherein the means for separating includes a filter.

19. The street sweeper of claim 13, wherein the airflow from the means for rotary sweeping passes within a conveyor housing having a first cross sectional area and further wherein the means for separating includes increasing the cross sectional area of the airflow within the hopper relative to the airflow within the conveyor housing, thereby effecting a reduction of airflow velocity.

20. The street sweeper of claim 13, wherein the means for generating an airflow is a fan.

21. The street sweeper of claim 13, wherein the transport means includes at least one rear axle and further wherein the means for rotary sweeping includes a rotary broom, the rotary broom being carried rearward of the at least one rear axle.

22. The street sweeper of claim 21, wherein the rotary

broom is rotated by a hydraulic motor.

23. The street sweeper of claim 22, wherein the rotary broom is carried rearward of the at least one rear axle by a pair of pivotal broom support arms.

24. The street sweeper of claim 23, wherein the pair of pivotal broom support arms control contact between the rotary broom and road surface to be swept, such that the rotary broom contacts the road surface in a first configuration and does not contact the road surface in a second configuration.

25. The street sweeper of claim 24, wherein the pair of pivotal broom support arms control the force of the rotary broom contact with road surface in the first configuration.

26. A method of cleaning a road surface, comprising the steps of:

a. providing a rotary broom on a truck, the truck carrying a hopper and including vacuum induced airflow from the rotary broom to the hopper and a debris conveyor from the rotary broom to the hopper;

b. rotating the rotary broom against the road surface while moving the truck in a forward direction such that the action of the rotary broom is counter to the forward direction;

c. conveying dislodged debris on the conveyor from the rotary broom to the hopper; and,

d. entraining airborne dust in the induced airflow from the rotary broom to the hopper.

27. The method of claim 26, wherein the truck further includes a gutter broom mounted forward of the rotary broom and induced airflow from the rotary broom to the hopper, and further comprising the steps of:

a. rotating the gutter broom against a gutter while moving the truck in a forward direction such that the action of the gutter broom is counter to the forward direction;

b. entraining airborne dust in the induced airflow from the gutter broom to the hopper; and,

c. sweeping dislodged debris from the gutter to a position in front of the rotary broom.

28. The method of claim 27, further comprising the step of separating entrained airborne dust from the induced airflow within the hopper.

29. The method of claim 28, wherein the separating step includes the step of filtering the entrained airborne dust to separate it form the induced airflow.

30. The method of claim 29, wherein the separating step includes the step of reducing velocity of the induced airflow.

31. A street sweeper with vacuumized dust control, comprising:

a. a truck means, the truck means having a chassis, the chassis having a front axle and at least one rear axle;

b. a superstructure framework means, the superstructure framework means being mounted on the chassis, the superstructure framework means including a plurality of framework members and having a pair of pivotal broom support arms, the pivotal broom support arms being directed generally rearward;

c. a rotary broom means, the rotary broom means having opposing ends supported by the pair of pivotal broom support arms such that the rotary broom means is located rearward of the at least one rear axle, the rotary broom means being rotatable to sweep a road surface traveled by the truck means by sweeping counter to the direction of travel;

d. a rotary broom chamber means, the vacuumized chamber means being located around and about the rotary broom means and in close proximity to the road surface, the rotary broom chamber means containing dust which becomes airborne during sweeping of the road surface by the rotary broom means;

e. a hopper means attached to the chassis, the hopper means being to the chassis attached via a scissors jack mounting frame and a scissors jack assembly, the hopper means being capable of storing dust and debris, the hopper means having a fan associated

therewith, the fan causing airflow from the rotary broom chamber means to the hopper mean and then through a filter and thereby passing out of the hopper means, while airborne dust remains in the hopper means, the airborne dust being substantially blocked from passing by the filter; and,

f. a conveyor housing means, the conveyor housing means communicating between the rotary broom chamber means and the hopper means, the conveyor housing means having a conveyor extending therethrough, the conveyor having a cleated belt which operates in a continuous loop and carries debris from the rotary broom means to the hopper means and simultaneously conducts the airflow and airborne dust from the rotary broom chamber means through the conveyor housing means to the hopper means.

32. A street sweeper with vacuumized dust control, comprising:

a. a truck;

b. a superstructure framework;

c. a rotary broom;

d. a rotary broom chamber;

e. a hopper;

f. a conveyor; and,

g. a conveyor housing.